

# Haiwen Cai

## List of Publications by Year in descending order

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citations

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times ranked

997  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-Low-Noise MIMO Distributed Acoustic Sensor Using Few-Mode Optical Fibers. Journal of Lightwave Technology, 2022, 40, 3062-3071.	4.6	6
2	Frequency-Stabilized External Cavity Diode Laser at 1572 nm Based on Frequency Stability Transfer. IEEE Photonics Technology Letters, 2022, 34, 203-206.	2.5	7
3	Frequency stabilized ultra-low-noise DFB fiber laser based on intracavity dual mode frequency self-reference mechanism. , 2022, , .		0
4	Ultra-Stable Fiber Laser Based on Intracavity Dual Mode Self-Reference Mechanism. Journal of Lightwave Technology, 2022, 40, 3923-3929.	4.6	4
5	A Low Temperature Coefficient Time-to-Digital Converter with 1.3 ps Resolution Implemented in a 28 nm FPGA. Sensors, 2022, 22, 2306.	3.8	7
6	Distributed optical fiber hydrophone based on $\hat{\mu}$ -OTDR and its field test. Optics Express, 2021, 29, 3147.	3.4	63
7	Fiber-optic time-frequency transfer in gigabit ethernet networks over urban fiber links. Optics Express, 2021, 29, 11693.	3.4	5
8	Absolute phase marking technology and fiber-optic remote coherent phase transmission. Optics Express, 2021, 29, 14041.	3.4	4
9	Practical Performance Enhancement of DAS by Using Dense Multichannel Signal Integration. Journal of Lightwave Technology, 2021, 39, 6348-6354.	4.6	10
10	High SNR $\hat{\mu}$ -OTDR with Multi-Transverse Modes Heterodyne Matched-Filtering Technology. Sensors, 2021, 21, 7460.	3.8	3
11	Recent Progress in Distributed Fiber Acoustic Sensing with $\hat{\mu}$ -OTDR. Sensors, 2020, 20, 6594.	3.8	63
12	High SNR $\hat{\mu}$ -OTDR Based on Frequency and Wavelength Diversity With Differential Vector Aggregation Method. IEEE Photonics Journal, 2020, 12, 1-12.	2.0	10
13	Ultralow noise DFB fiber laser with self-feedback mechanics utilizing the inherent photothermal effect. Optics Express, 2020, 28, 23717.	3.4	7
14	Multi-source aliasing suppression for distributed fiber acoustic sensing with directionally coherent enhancement technology. Optics Letters, 2020, 45, 5672.	3.3	15
15	Fiber-optic joint time and frequency transfer with the same wavelength. Optics Letters, 2020, 45, 208.	3.3	23
16	Multifunctional photonic broadband RF memory for complex electronic jamming. Laser Physics Letters, 2020, 17, 116201.	1.4	5
17	Narrow linewidth swept laser source based on cascaded multi-wavelength injection of DFB lasers. Applied Optics, 2020, 59, 9393.	1.8	1
18	Configurable photonic true-time delay network and its application in multi-beamforming. Laser Physics Letters, 2019, 16, 126203.	1.4	3

#	ARTICLE	IF	CITATIONS
19	Photonic Radio Frequency Memory with Controlled Doppler Frequency Shift. , 2019, , .		2
20	Detailed Evaluation of Centroid Analysis for Extracting Brillouin Frequency Shift of Fiber Distributed Sensors. IEEE Sensors Journal, 2019, 19, 163-170.	4.7	4
21	Practical multi-class event classification approach for distributed vibration sensing using deep dual path network. Optics Express, 2019, 27, 23682.	3.4	42
22	Direct Measurement of Phase-related Parameters of Narrow-linewidth Lasers based on 120-degree Phase Difference Interferometer. , 2019, , .		0
23	Noise Reduction of Single Frequency Fiber Lasers. , 2019, , .		0
24	Polarization influence and its mitigation on laser frequency noise measurement by a short-delayed self-homodyne interference method. Applied Optics, 2019, 58, 6693.	1.8	4
25	Photonic high-fidelity storage and Doppler frequency shift of broadband RF pulse signals. Optics Express, 2019, 27, 34359.	3.4	11
26	Slow-Light Effect and Mode Selection of Double Fiber Ring With a Fiber Bragg Grating. IEEE Photonics Journal, 2018, 10, 1-9.	2.0	3
27	Narrow-linewidth swept laser phase reconstruction and noise measurement technology and its applications. Optics Express, 2018, 26, 32958.	3.4	8
28	Ultra-low noise optical injection locking amplifier with AOM-based coherent detection scheme. Scientific Reports, 2018, 8, 13135.	3.3	8
29	Configurable Photonic True-Time Delay Line Based On Cascaded Linearly Chirped Fiber Bragg Grating. , 2018, , .		4
30	Brillouin Frequency Shift of Fiber Distributed Sensors Extracted from Noisy Signals by Quadratic Fitting. Sensors, 2018, 18, 409.	3.8	17
31	High spatial resolution $\hat{\Gamma}$ -OTDR with long sensing distance. , 2018, , .		4
32	Low noise single frequency DFB fiber laser. , 2018, , .		0
33	Pulse compression phase sensitive optical time domain reflectometer with sub-meter resolution. , 2017, , .		2
34	Novel railway-subgrade vibration monitoring technology using phase-sensitive OTDR. Proceedings of SPIE, 2017, , .	0.8	17
35	Single Frequency Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , .	0.1	9
36	Frequency Sweeping of Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , 205-234.	0.1	0

#	ARTICLE	IF	CITATIONS
37	Optical Phase Locked Loop and Frequency Transfer. Optical and Fiber Communications Reports, 2017, , 235-266.	0.1	0
38	Characteristics of double fiber ring incorporated with a fiber Bragg grating. , 2017, , .		0
39	120° Phase Difference Interference Technology Based on 3 Å— 3 Coupler and its Application in Laser Noise Measurement. , 2017, , .		1
40	High spatial resolution phase-sensitive optical time domain reflectometer with a frequency-swept pulse. Optics Letters, 2017, 42, 391.	3.3	99
41	Frequency Stabilization of Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , 167-204.	0.1	0
42	Noises and Stability of Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , 41-79.	0.1	1
43	External Cavity Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , 117-166.	0.1	0
44	Applications of Single-Frequency Semiconductor Lasers. Optical and Fiber Communications Reports, 2017, , 267-302.	0.1	1
45	Subkilohertz linewidth reduction of a DFB diode laser using self-injection locking with a fiber Bragg grating Fabry-Perot cavity. Optics Express, 2016, 24, 17406.	3.4	55
46	Photothermal effects in phase shifted FBG with varied light wavelength and intensity. Optics Express, 2016, 24, 25370.	3.4	8
47	Research on laser induced damage in PLZT electro-optical transparent ceramic. Optical Materials Express, 2016, 6, 952.	3.0	4
48	Narrow linewidth hybrid integrated external cavity diode laser for precision applications. Proceedings of SPIE, 2016, , .	0.8	0
49	All-optical noise reduction of fiber laser via intracavity SOA structure. Applied Optics, 2016, 55, 8185.	2.1	1
50	Intensity noise reduction technique of fiber laser via intracavity SOA structure. , 2016, , .		0
51	Laser phase noise measurement by using an adjustment-free Michelson interferometer based on 3Å—3 optical coupler. , 2015, , .		1
52	Ultra-broadband phase-sensitive optical time-domain reflectometry with a temporally sequenced multi-frequency source. Optics Letters, 2015, 40, 5192.	3.3	90
53	Narrow-linewidth laser source with precision frequency tunability for distributed optical sensing applications. , 2015, , .		0
54	White light cavity via modification of linear and nonlinear dispersion in an N-type atomic system. Optics Communications, 2015, 342, 189-192.	2.1	9

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55	Novel Slow-light Reflector Composed of a Fiber Ring Resonator and Low-reflectivity Fiber Bragg Grating. <i>Journal of Lightwave Technology</i> , 2015, , 1-1.	4.6	3
56	Precision and broadband frequency swept laser source based on high-order modulation-sideband injection-locking. <i>Optics Express</i> , 2015, 23, 4970.	3.4	47
57	Fast optical frequency sweeping using voltage controlled oscillator driven single sideband modulation combined with injection locking. <i>Optics Express</i> , 2015, 23, 7038.	3.4	20
58	Continuous angle steering of an optically- controlled phased array antenna based on differential true time delay constituted by micro-optical components. <i>Optics Express</i> , 2015, 23, 9432.	3.4	20
59	Laser phase and frequency noise measurement by Michelson interferometer composed of a 3 $\bar{\text{A}}$ – 3 optical fiber coupler. <i>Optics Express</i> , 2015, 23, 22386.	3.4	107
60	Laser frequency offset locking via tripod-type electromagnetically induced transparency. <i>Applied Optics</i> , 2014, 53, 2632.	1.8	6
61	All-optical frequency stabilization and linewidth reduction of distributed feedback diode lasers by polarization rotated optical feedback. <i>Optics Express</i> , 2014, 22, 15757.	3.4	7
62	Observation of multi-electromagnetically induced transparency in V-type rubidium atoms. <i>Journal of Modern Optics</i> , 2014, 61, 631-635.	1.3	20
63	Realization of cavity linewidth narrowing via interacting dark resonances in a tripod-type electromagnetically induced transparency system. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014, 31, 144.	2.1	15
64	High sampling rate multi-pulse phase-sensitive OTDR employing frequency division multiplexing. <i>Proceedings of SPIE</i> , 2014, , .	0.8	6
65	Polarization-independent electro-optic modulator based on PMNT electrically-controlled birefringence effect and Sagnac interferometer. <i>Optics and Laser Technology</i> , 2014, 57, 5-8.	4.6	11
66	Fiber Ring With Long Delay Used as a Cavity Mirror for Narrowing Fiber Laser. <i>IEEE Photonics Technology Letters</i> , 2014, 26, 1621-1624.	2.5	15
67	Cavity linewidth narrowing by optical pumping-assisted electromagnetically induced transparency in V-type rubidium at room temperature. <i>Journal of Modern Optics</i> , 2014, 61, 322-327.	1.3	5
68	Characteristics and Explanations of Interference Fading of a $\phi$ -OTDR With a Multi-Frequency Source. <i>Journal of Lightwave Technology</i> , 2013, 31, 2947-2954.	4.6	134
69	Numerical analysis of spectral shaping based on superstructure fiber Bragg grating in high-power Nd:glass chirped pulse amplification system. <i>Optik</i> , 2013, 124, 471-476.	2.9	3
70	Modulation-Free Frequency Stabilization Based on Polarization-Split Sagnac Loop. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 1031-1034.	2.5	6
71	Analysis of spontaneous Brillouin scattering spectrum for different modulated pulse shape. <i>Optik</i> , 2013, 124, 2417-2420.	2.9	6
72	Effects of modulated pulse format on spontaneous Brillouin scattering spectrum and BOTDR sensing system. <i>Optics and Laser Technology</i> , 2013, 46, 37-41.	4.6	14

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73	Interference-fading-free phase-demodulated OTDR system. Proceedings of SPIE, 2012, , .	0.8	36
74	Design of Wide-Band Frequency Shift Technology by Using Compact Brillouin Fiber Laser for Brillouin Optical Time Domain Reflectometry Sensing System. IEEE Photonics Journal, 2012, 4, 1686-1692.	2.0	16
75	Improvement of pulse shape on Brillouin optical time domain reflectometry. , 2012, , .		1
76	Analysis and Implementation of Reflection-Type Electro-Optic Phase Diffraction Grating. Journal of Lightwave Technology, 2012, 30, 2796-2802.	4.6	5
77	100-mW linear polarization single-frequency all-fiber seed laser for coherent Doppler lidar application. Optics Communications, 2012, 285, 149-152.	2.1	57
78	Phase-sensitive OTDR system based on digital coherent detection. Proceedings of SPIE, 2011, , .	0.8	71
79	Tunable External Cavity Diode Laser with a PLZT Electro-Optic Ceramic Deflector. IEEE Photonics Technology Letters, 2011, , .	2.5	6
80	Mode-hop-free electro-optically tuned external-cavity diode laser using volume Bragg grating and PLZT ceramic. Optics Express, 2011, 19, 17244.	3.4	11
81	High-efficiency electrically tunable phase diffraction grating based on a transparent lead magnesium niobate-lead titanite electro-optic ceramic. Optics Letters, 2011, 36, 2453.	3.3	12
82	Optical characteristics of transparent PMNT ceramic and its application at high speed electro-optic switch. Optics Communications, 2011, 284, 3886-3890.	2.1	21
83	Synthesis of fiber Bragg grating for gain-narrowing compensation in high-power Nd: Glass chirped pulse amplification system. Optical Fiber Technology, 2011, 17, 185-190.	2.7	6
84	Phase-sensitive OTDR system based on digital coherent detection. , 2011, , .		28
85	Orientation-free pressure sensor based on $\lambda$ -shifted single-mode-fiber Sagnac interferometer. Applied Optics, 2010, 49, 5043.	2.1	10
86	Modulation-free frequency stabilization of external-cavity diode laser based on a phase-difference biased Sagnac interferometer. Optics Letters, 2010, 35, 3853.	3.3	10
87	Fiber Sagnac $\lambda$ -shifted interferometer for a polarization-independent PMNT high-speed electro-optic switch. Optics Letters, 2010, 35, 4187.	3.3	11
88	Numerical Investigation of Ultrashort Complex Pulse Generation Based on Pulse Shaping Using a Superstructure Fiber Bragg Grating. Journal of Lightwave Technology, 2009, 27, 2449-2456.	4.6	8
89	Polarization Characteristics of an External Cavity Diode Laser With Littmanâ€“Metcalf Configuration. IEEE Photonics Technology Letters, 2009, 21, 984-986.	2.5	7
90	Stabilization of optical Fabryâ€“Perot sensor by active feedback control of diode laser. Sensors and Actuators A: Physical, 2008, 148, 376-380.	4.1	25

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91	Instabilities in a grating feedback external cavity semiconductor laser. Optics Express, 2008, 16, 17014.	3.4	13
92	A fiber Bragg grating with triangular spectrum as wavelength readout in sensor systems. Optics Communications, 2004, 229, 197-201.	2.1	31
93	Line-shape of Delayed Self-heterodyne Varied with Noise Types and Delays. Applied Optics, 0, , .	1.8	1